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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,015	05/13/2005	Tetsuyuki Nakayashiki	2114-0114PUS1	8771
2292 7590 12/09/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
WALKE, AMANDA C				
ART UNIT		PAPER NUMBER		
1795				
NOTIFICATION DATE		DELIVERY MODE		
12/09/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

# Office Action Summary

**Application No.**

10/529,015

**Applicant(s)**

NAKAYASHIKI ET AL.

**Examiner**

Amanda C. Walke

**Art Unit**

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-27 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 18-27 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SF/US)  
Paper No(s)/Mail Date 5/30/6 3/24/05  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of group I, claims 18 and 19 in the reply filed on 10/15/08 is acknowledged. The traversal is on the ground(s) that the non-elected claims have been amended to depend from or include the subject matter of the elected claims. This has been found persuasive and the restriction has been withdrawn by the office. Claims 18-27 are pending and an action on the merits on all claims follows.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 18-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Koehnle et al (6,773,474).

Koehnle et al disclose a photopolymerizable coating (UV sensitive) comprising a triarylsulfonium salt, a polyfunctional acrylate, an radical initiator, a polymerizable material (including epoxy-containing materials; columns 7 and 8), and a quaternary ammonium salt useful in various applications. The material may further comprise curing agents, binders,

surfactants, fillers, plasticizers, pigments, thermal initiators, and sensitizers in amount that appear to fall within the scope of the instant claim limitations (see columns 11-13).

Triarylsulfonium salts that are useful for the ternary curative include triarylsulfonium salts having the formula



wherein

$R^1$ ,  $R^2$  and  $R^3$  independently represent an, optionally substituted, aromatic group (e.g., substituted or unsubstituted phenyl, thienyl, or furanyl) having from about 4 to about 20 carbon atoms.  $R^1$ ,  $R^2$  and/or  $R^3$  may, optionally, have one or more fused rings (for example, naphthyl, benzothienyl, dibenzothienyl, benzofuranyl, dibenzofuranyl). Exemplary substituents that may be present, in any number or combination thereof, on aromatic groups  $R^1$ ,  $R^2$  and  $R^3$  include, for example, alkyl having from 1 to 12 carbon atoms (e.g., for example, methyl, ethyl, dodecyl), alkoxy having from 1 to 12 carbon atoms (e.g., methoxy, ethoxy, ethoxyethoxy), halogen, aryl having from about 4 to about 16 carbon atoms (e.g., phenyl, furanyl), thioaryl having from 4 to 16 carbon atoms (e.g., thiophenyl), hydroxy, acryl having from 4 to 16 carbon atoms (e.g., benzoyl, methoxybenzoyl).

$Y^-$  represents a non-interfering anion.

Non-interfering anions are those anions that do not substantially inhibit cationic polymerization. Desirably, non-interfering anions have the formula  $DQ_n^-$ , wherein D is a metal from Groups 8 to 11 or a metalloid from Groups 13 to 15 of the Periodic Table of the Elements (IUPAC version), Q is a halogen atom, and n is an integer having a value of from 1 to 6. Desirable metals are copper, zinc, titanium, vanadium, chromium, magnesium, manganese, iron, cobalt, or nickel. Desirable metalloids are desirably boron, aluminum, antimony, tin, arsenic and phosphorous. Desirably, Q is chlorine or fluorine. Exemplary non-interfering anions are  $BF_4^-$ ,  $PF_6^-$ ,  $SbF_6^-$ ,  $FeCl_4^-$ ,  $SnCl_5^-$ ,  $AsF_6^-$ ,  $SbF_4OH^-$ ,  $SbCl_5^-$ ,  $SbF_5^-$ ,  $AlF_4^-$ ,  $GaCl_4^-$ ,  $InF_4^-$ ,  $TiF_6^{2-}$ ,  $ZrF_6^{2-}$ , and  $CF_3SO_3^-$ . Desirable non-interfering anions are  $BF_4^-$ ,  $PF_6^-$ ,  $SbF_6^-$ ,  $FeCl_4^-$ ,  $SnCl_5^-$ ,  $AsF_6^-$ ,  $SbF_4OH^-$ ; more desirably,  $PF_6^-$ ,  $SbF_6^-$ ,  $SbF_4OH^-$ .

It would have been obvious to one of ordinary skill in the art to prepare the material of Koehnle et al choosing to employ two substituted aryl substituents and a dibenzylthienyl group given the teachings of the reference.

With respect to the limitation of the instant claim 23 that the UV curable composition be useful for a food wrapping material, this is an intended use limitation and does not limit the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amanda C. Walke whose telephone number is 571-272-1337. The examiner can normally be reached on M-R 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amanda C Walke  
Primary Examiner  
Art Unit 1795

/Amanda C Walke/  
Primary Examiner, Art Unit 1795